

SEQUENCE LISTING

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WALTON, Paul A.

<120> PROMOTION OF PEROXISOMAL CATALASE FUNCTION IN CELLS

<130> 28928.0009)

<140> (to be assigned)  
<141> 2005-04-29

<150> PCT/US03/34512  
<151> 2003-10-30

<150> US 60/422,100  
<151> 2002-10-30

<160> 21

<170> PatentIn Ver. 3.2

<210> 1  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 1  
Lys Ala Asn Leu  
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<210> 2  
<211> 527  
<212> PRT  
<213> Homo sapiens

<400> 2  
Met Ala Asp Ser Arg Asp Pro Ala Ser Asp Gln Met Gln His Trp Lys  
1 5 10 15  
Glu Gln Arg Ala Ala Gln Lys Ala Asp Val Leu Thr Thr Gly Ala Gly  
20 25 30  
Asn Pro Val Gly Asp Lys Leu Asn Val Ile Thr Val Gly Pro Arg Gly  
35 40 45  
Pro Leu Leu Val Gln Asp Val Val Phe Thr Asp Glu Met Ala His Phe  
50 55 60  
Asp Arg Glu Arg Ile Pro Glu Arg Val Val His Ala Lys Gly Ala Gly  
65 70 75 80

Ala	Phe	Gly	Tyr	Phe	Glu	Val	Thr	His	Asp	Ile	Thr	Lys	Tyr	Ser	Lys	85	90	95
Ala	Lys	Val	Phe	Glu	His	Ile	Gly	Lys	Lys	Thr	Pro	Ile	Ala	Val	Arg	100	105	110
Phe	Ser	Thr	Val	Ala	Gly	Glu	Ser	Gly	Ser	Ala	Asp	Thr	Val	Arg	Asp	115	120	125
Pro	Arg	Gly	Phe	Ala	Val	Lys	Phe	Tyr	Thr	Glu	Asp	Gly	Asn	Trp	Asp	130	135	140
Leu	Val	Gly	Asn	Asn	Thr	Pro	Ile	Phe	Phe	Ile	Arg	Asp	Pro	Ile	Leu	145	150	155
Phe	Pro	Ser	Phe	Ile	His	Ser	Gln	Lys	Arg	Asn	Pro	Gln	Thr	His	Leu	165	170	175
Lys	Asp	Pro	Asp	Met	Val	Trp	Asp	Phe	Trp	Ser	Leu	Arg	Pro	Glu	Ser	180	185	190
Leu	His	Gln	Val	Ser	Phe	Leu	Phe	Ser	Asp	Arg	Gly	Ile	Pro	Asp	Gly	195	200	205
His	Arg	His	Met	Asn	Gly	Tyr	Gly	Ser	His	Thr	Phe	Lys	Leu	Val	Asn	210	215	220
Ala	Asn	Gly	Glu	Ala	Val	Tyr	Cys	Lys	Phe	His	Tyr	Lys	Thr	Asp	Gln	225	230	235
Gly	Ile	Lys	Asn	Leu	Ser	Val	Glu	Asp	Ala	Ala	Arg	Leu	Ser	Gln	Glu	245	250	255
Asp	Pro	Asp	Tyr	Gly	Ile	Arg	Asp	Leu	Phe	Asn	Ala	Ile	Ala	Thr	Gly	260	265	270
Lys	Tyr	Pro	Ser	Trp	Thr	Phe	Tyr	Ile	Gln	Val	Met	Thr	Phe	Asn	Gln	275	280	285
Ala	Glu	Thr	Phe	Pro	Phe	Asn	Pro	Phe	Asp	Leu	Thr	Lys	Val	Trp	Pro	290	295	300
His	Lys	Asp	Tyr	Pro	Leu	Ile	Pro	Val	Gly	Lys	Leu	Val	Leu	Asn	Arg	305	310	315
Asn	Pro	Val	Asn	Tyr	Phe	Ala	Glu	Val	Glu	Gln	Ile	Ala	Phe	Asp	Pro	325	330	335
Ser	Asn	Met	Pro	Pro	Gly	Ile	Glu	Ala	Ser	Pro	Asp	Lys	Met	Leu	Gln	340	345	350
Gly	Arg	Leu	Phe	Ala	Tyr	Pro	Asp	Thr	His	Arg	His	Arg	Leu	Gly	Pro	355	360	365
Asn	Tyr	Leu	His	Ile	Pro	Val	Asn	Cys	Pro	Tyr	Arg	Ala	Arg	Val	Ala	370	375	380

Asn Tyr Gln Arg Asp Gly Pro Met Cys Met Gln Asp Asn Gln Gly Gly  
 385 390 395 400  
 Ala Pro Asn Tyr Tyr Pro Asn Ser Phe Gly Ala Pro Glu Gln Gln Pro  
 405 410 415  
 Ser Ala Leu Glu His Ser Ile Gln Tyr Ser Gly Glu Val Arg Arg Phe  
 420 425 430  
 Asn Thr Ala Asn Asp Asp Asn Val Thr Gln Val Arg Ala Phe Tyr Val  
 435 440 445  
 Asn Val Leu Asn Glu Glu Gln Arg Lys Arg Leu Cys Glu Asn Ile Ala  
 450 455 460  
 Gly His Leu Lys Asp Ala Gln Ile Phe Ile Gln Lys Lys Ala Val Lys  
 465 470 475 480  
 Asn Phe Thr Glu Val His Pro Asp Tyr Gly Ser His Ile Gln Ala Leu  
 485 490 495  
 Leu Asp Lys Tyr Asn Ala Glu Lys Pro Lys Asn Ala Ile His Thr Phe  
 500 505 510  
 Val Gln Ser Gly Ser His Leu Ala Ala Arg Glu Lys Ala Asn Leu  
 515 520 525

<210> 3  
 <211> 1586  
 <212> DNA  
 <213> Homo sapiens

<400> 3  
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 ggaatccagt taattacttt gctgaggttg aacagatagc cttcgacca agcaaacatgc 1020  
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 acactcaggc ccactgcctg ggacccaatt atcttcatat acctgtgaac tgtccctacc 1140  
 gtgctcaggt ggccaactac cagcgtgatg gcccgatgtg catgcaggac aatcagggtg 1200  
 gtgctccaaa ttactacccc aacagctttg gtgctccgga acaacagcct tctgccttg 1260  
 agcacagcat ccaatattct ggagaagtgc ggagattcaa cactgccaat gatgataacg 1320

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ttactcaggt gcgggcattc tatgtgaacg tgctgaatga ggaacagagg aaacgtctgt 1380
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agaacttcac tgaggtccac cctgactacg ggagccacat ccaggctctt ctggacaagt 1500
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<210> 4
<211> 16
<212> PRT
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 4
Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
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<210> 5
<211> 16
<212> PRT
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
      peptide

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<400> 5
Arg Gln Ile Lys Ile Phe Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
  1             5             10             15

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<210> 6
<211> 16
<212> PRT
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
      peptide

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<400> 6
Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Phe Lys Lys
  1             5             10             15

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<210> 7
<211> 16
<212> PRT
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
      peptide

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<400> 7

Arg Gln Ile Lys Ile Phe Phe Gln Asn Arg Arg Met Lys Phe Lys Lys  
1 5 10 15

<210> 8

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 8

Lys Glu Thr Trp Trp Glu Thr Trp Trp Thr Glu Trp Ser Gln Pro Lys  
1 5 10 15

Lys Lys Arg Lys Val  
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<210> 9

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
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<400> 9

Lys Glu Thr Trp Trp Glu Thr Trp Trp Thr Glu Trp  
1 5 10

<210> 10

<211> 6

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 10

Lys Lys Lys Arg Lys Val  
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<210> 11

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 11

Arg Leu Gln Val Val Leu Gly His Leu  
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<210> 12

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 12

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19

<210> 13

<211> 50

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

<400> 13

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<210> 14

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 14

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<210> 15

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 15

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42

<210> 16

<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 16  
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<210> 17  
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<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 17  
gggcgcaagc tttcacagat ttgccttctc cct 33

<210> 18  
<211> 44  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 18  
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<210> 19  
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<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 19  
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<210> 20  
<211> 6  
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<220>  
<223> Description of Artificial Sequence: Synthetic  
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<400> 20

His His His His His His  
1 5

<210> 21

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 21

Lys Ala Asn Leu Ser Leu Leu  
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